Air Pollution

Nevada Proposes Mercury Controls For Precious Metal Mining Operations

PHOENIX--Nevada on Nov. 17 proposed rules for monitoring and controlling mercury air emissions from thermal treatment units at precious metal mining operations, the state Division of Environmental Protection announced.

Under the proposal, the division would require controls at such facilities through a new mercury air emissions control permitting program. The program would be an adjunct to the division's current "operating-permit-to-construct" program.

The new permit requirement would apply to precious metals mining facilities that process mercury-containing ore and use thermal treatment processes that can potentially release mercury into the atmosphere.

The proposal comes in the wake of a voluntary program begun in 2001 that the division said reduced mercury air emissions from such operations by 82 percent.

The proposed program now goes to a public hearing before it can be considered by the state Environmental Commission, division spokeswoman Cindy Anderson told BNA Nov. 18.

No date has been set for a commission hearing. However, Anderson told BNA that a timetable for implementation by early 2006 is under consideration.

Meanwhile, an industry representative, Rich Haddock of Utah-based Barrick Gold Corp., an international gold mining company with operations in Nevada, told BNA his company welcomes the proposal.

Haddock, Barrick's vice president for environment, told BNA, "We're supportive of the program in general." While the program goes beyond the voluntary program in terms of monitoring and reporting, he said, the company is comfortable with the objectives.

In May 2000, the U.S. Environmental Protection Agency published the Toxics Release Inventory report data for reporting year 1998. While mercury emissions from Nevada precious metals mining companies were below Clean Air Act major source thresholds, the division and the companies determined that mercury emissions should be reduced.

Voluntary Program Began in 2002.

The voluntary program began in 2002, when state regulators and EPA developed a plan to reduce mercury air emissions from four major gold mining operations.

According to EPA, the most recent data indicate annual mercury air emissions are at 3,755 pounds, a reduction of 17,343 pounds from the program's 2001 baseline emissions of 21,098 pounds.

The regulatory program would have three tiers, each having a specific set of requirements.

The initial phase would establish presumptive Nevada maximum achievable control technology (MACT) for existing mercury controls at facilities that operate under the voluntary program. MACT is defined as the average of the best-performing 12 percent of sources.

It would also establish testing, sampling, operation, maintenance, monitoring, recordkeeping, and reporting as permit requirements to ensure ongoing enforceability and effectiveness.

Units currently included in the voluntary program would be designated as Tier 1.

While the focus of the program would be on mercury-specific controls, such as carbon filters and mercury scrubbers, controls originally designed to limit other particulate and gaseous emissions also help control mercury emissions. These include baghouses and sulfur dioxide scrubbers.

Precious metals mining facilities would complete a questionnaire. Units not participating in the voluntary program would proceed through a Tier 2 mercury permit process similar to Tier 1.

Units that do not have the potential to emit mercury through thermal processes would be considered Tier 3 units.

By William H. Carlile

More information on the proposed mercury control emissions program is available at http://www.ndep.nv.gov/mercury/index.htm.